California State Coastal Conservancy

INITIAL STUDY

AND

PROPOSED MITIGATED NEGATIVE DECLARATION

FOR

CALIFORNIA DERELICT FISHING GEAR REMOVAL PROGRAM

May 3, 2005

Prepared for:

California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530
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Environmental Checklist

1. Project Title: California Derelict Fishing Gear Removal Program

2. Lead agency name and address:
California Coastal Conservancy
1330 Broadway, 11th floor
Oakland, CA 94612-2530

3. Contact person and email address: Sheila Semans; ssemans@scc.ca.gov

4. Program locations:

- Humboldt County: State marine waters to 16-fathom isobath from Humboldt Bay north to Trinidad Head
- Monterey County: State marine waters to 16-fathom isobath from Elkhorn Slough to Point Lobos
- San Luis Obispo County: State marine waters to 16-fathom isobath from Point Estero to Point Buchon
- Los Angeles County: State marine waters to 16-fathom isobath surrounding Santa Catalina Island

5. Program sponsors' name and address:
California Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

6. General plan designation: This project will take place in marine waters and is not relevant to land-use planning documents.

7. Zoning: This project will take place in marine waters that are un-zoned.

8. Description of Project: The program will coordinate and conduct at-sea location and removal of lost and abandoned commercial and recreational fishing gear (nets, pots, traps, lines) from state marine waters, from the intertidal zone out to the 16-fathom isobath.

9. Surrounding land uses and setting: Points of vessel embarkation will be nearest public-access harbors/ports/marinas in Humboldt (Eureka), Monterey (Moss Landing, Monterey), San Luis Obispo (Morro Bay) and Los Angeles (San Pedro, Avalon, Two Harbors) Counties.

10. Other public agencies from which approval may be <u>required or solicited</u>:

California Coastal Commission
California Department of Fish and Game
California Department of Boating and Waterways
California State Lands Commission
California State Parks and Recreation
California State Water Resources Control Board
County of Humboldt
County of Los Angeles
County of Monterey
County of San Luis Obispo
NOAA / National Marine Fisheries Service
NOAA / National Marine Sanctuaries
Regional Water Quality Control Boards: North Coast, Central Coast, Los Angeles
United States Army Corps of Engineers
United States Coast Guard
United States Fish and Wildlife Service

Environmental Factors Potentially Affected
The project, as mitigated, will result in no potentially significant adverse environmental impacts :

	Aesthetics		Agricultural Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Hazards and Hazardous materials		Hydrology/Water Quality		Land Use/Planning
	Mineral Resources		Noise		Population/Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities/Service Systems		Mandatory Findings of Significance		

Determination

The State Coastal Conservancy (SCC) has determined that as mitigated, the California Derelict Fishing Gear Removal Program would not have a significant effect on the environment. The SCC initially identified potentially significant impacts to some of the environmental factors listed above. The program as described in the initial study discusses potentially significant impacts and the measures to be incorporated in the project to reduce these potential impacts to a level below significance. The evidence supporting this determination is drawn from information provided by regulatory agencies, including the California Department of Fish and Game, the NOAA National Marine Fisheries Service and NOAA National Marine Sanctuaries, the State Water Resources Control Board, and State Parks and Recreation. The project has been

developed, refined, and field-tested over the past two years by the Northwest Straits Commission (Mt. Vernon, WA) and Natural Resources Consultants, Inc. (Seattle, WA) to arrive at the proposed practices, activities and specifications to avoid, reduce, and minimize potential adverse environmental impacts.

On the basis of this initial evaluation:

[X] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

_____ _____

Signature Date

_____

Printed Name

INITIAL STUDY

California Derelict Fishing Gear Removal Program

PROGRAM DESCRIPTION

I. Significance and Justification

Derelict fishing gear is defined as lost or abandoned fishing nets, lines, pots, traps, and other commercial and recreational fishing gear that sits on the seafloor, gets caught on rocky reefs, or floats in the water column. The majority of this gear does not decompose in seawater and can remain in the marine environment for years. Derelict gear impacts the marine environment in several ways: it can continue to "catch" marine animals, which become entangled or trapped; it can damage the habitat upon which it becomes entangled or upon which it rests; it can pose an underwater hazard for boaters, entangling boat propellers and anchors; and it can similarly endanger humans, especially divers. Derelict fishing gear may not only contain the carcasses of marine animals, but may also negatively affect the quality of underwater habitat (e.g. via scouring action). Derelict gear is also a visual blight, diminishing the natural aesthetic quality of the seafloor and rocky reef habitat for underwater enthusiasts.

Coordinated efforts are in place in Hawaii and Washington[1] to actively remove derelict fishing gear from the marine environment. The universal aim of these programs is to remove derelict fishing gear that represents a hazard to people and to wildlife and/or that damages underwater habitat, and to do so in a safe and environmentally sensitive manner. In Washington State, where removal of derelict fishing gear is legislatively mandated, a derelict net pulled out of the water in 2003 contained: 150 dead salmon; several hundred dead Dungeness crab; several dogfish; and a shorebird skeleton[2].

The total amount of derelict fishing gear in California marine waters has not been quantified. However, marine biologists and resource managers conducting underwater research and monitoring encounter derelict gear at various depths on rocks or lying on the seafloor[3]. Marine engineers conducting surveys or underwater projects report that their equipment gets caught on derelict fishing gear, and that derelict gear is seen snagged on underwater cables and other structures[4]. California's largest marine mammal rehabilitation facility cares for an average of a dozen seals and sea lions a

[1] Washington Department of Fish and Wildlife. November 2002. *Derelict Fishing Gear Removal Guidelines*. 33 p. (http://nwstraits.org/derelict_gear.html)
[2] Natural Resources Consultants, Inc. May 2004. Norththe SeaDoc Societyst Straits Commission/Foundation Derelict Fishing Gear Program. 12 pp.
[3] Personal communications: Donna Schroeder, UC Santa Barbara; Dan Howard, Cordell Banks National Marine Sanctuary; Bob Farrell, DFG Marine Enforcement.
[4] Personal communications: Ed Saade, Fugro Pelagros, Inc, San Diego, CA; Allison Dettmer, California Coastal Commission.

year with serious injuries caused by entanglement in fishing gear[5], and the number of marine and aquatic birds treated every year at just one wildlife rehabilitation facility in Marin County has prompted that organization to launch a monofilament line recycling program[6].

Deliberate disposal of fishing gear in marine waters in California is unlawful. However, in the normal course of both commercial and recreational fishing operations, it is not uncommon for gear to become accidentally lost, either through the failure of lines, ropes and wires that normally attach fishing gear to rods, buoys or vessels, or the unintentional cutting of these lines by boat propellers or by underwater manmade structures. The following types of fishing gear are or have been used in California marine waters[7], and are therefore the types of gear most likely to be encountered as derelict. It is also possible for this gear to drift in to state waters from federal or Mexican waters. Included in this list are types of gear that were once used heavily, but are now either severely limited in their use through restrictions on fisheries, or are no longer allowed to be used in all or parts of California. Such gear may still be present, however, because in some cases restrictions did not really begin until the late 1970s, and so gear lost prior to then may still exist as derelict gear.

Gill nets: Gill nets are curtain-like nets that are suspended in the water with mesh openings large enough to permit only the heads of the targeted species to pass through. Set gill nets are allowed for use in southern California only, and drift gillnets are used in the swordfish and thresher shark fishery. Gill nets are primarily used to catch herring, swordfish and thresher shark. Historically, they were used for halibut, rockfish, white croaker, crabs and salmon.

Purse seine nets**:** Purse seines are nets that are cast in a circle around a school of fish, and then drawn closed at the bottom to prevent escape; the bowl or bag-like net is then hauled out of the water. Purse seine nets are used to catch coastal pelagic species like sardines, anchovies, squid, mackerel, some tuna species, white croaker, perch, smelt, and squid.

Trawl nets: Trawl nets are nets or mesh bags that are dragged at various depths or along the ocean bottom. They are used to catch halibut, ocean and bay shrimp, nearshore finfish and groundfish, and sea cucumbers. Generally speaking, commercial use of trawl nets is prohibited within 3 miles of shore in California; it is allowed within 1-3 miles of shore for halibut fishing.

[5] Marty Haulena, Marine Mammal Center, Sausalito, CA, personal communication

[6] Melanie Piazza, Wildlife Care, San Rafael, CA, personal communication

[7] California Department of Fish and Game. December 2001. *California's Living Marine Resources: A Status Report*. Editors: W. S. Leet, C. M. DeWees, R. Klingbeil, and E.J. Larson. 591 pp.

Long lines: Long lines are comprised of a long main line to which are attached a large number of hooks. They are used for catching nearshore finfish and groundfish, sharks, tuna, and dorado.

Pots and traps: Various types of pots, traps and baited hoop nets are used in both the commercial and recreational fisheries to catch prawns, lobster, crabs, sablefish and nearshore finfish.

Recreational gear: Lost or abandoned gear from recreational rod and reel and pot/trap fisheries can consist of lines, wires, hooks, flashers, downrigger wire, jugs, and pots.

II. Pilot Program Overview

The SeaDoc Society, at the University of California, Davis Wildlife Health Center, is launching a pilot program for removing derelict fishing gear in California. The mission of the SeaDoc Society is to ensure the health of marine wildlife and the ecosystems upon which they depend through science and education (www.seadocsociety.org). The California Derelict Fishing Gear Removal program will be a no-fault program which encourages ocean users to report the presence of derelict gear, and which will use experienced and certified SCUBA divers to remove tons of gear from near-shore waters in a safe and environmentally sensitive manner. The pilot project will position the program for long-term operation within the State of California by developing, implementing, testing and refining all facets of the program, including:

- Permission/authorization/approval from all appropriate agencies;
- Broad stakeholder awareness and involvement;
- Field-tested Standard Operating Procedures for all gear location and removal operations;
- Trained and experienced personnel and contractors;
- A variety of outreach materials and a website;
- Identified sources of potential future funding for long-term support.
- Derelict fishing gear removal from four coastal regions in California

The presence of derelict fishing gear in the marine environment will be located via purposeful surveys using 600 kHz sidescan sonar (for pots and traps) and by visual surveys conducted by drift divers (for nets and lines). Gear may also be located via opportunistic sighting and reporting of derelict gear by commercial or sport divers, fisherman, boaters, port authorities, resource managers, enforcement officers, surfers, and others who encounter derelict gear in the marine environment. A toll-free hotline and website will be established for this purpose.

During this pilot project, the SeaDoc Society will conduct 40 days (total) of field operations, including 20 days of gear location and 20 days of gear removal. The SeaDoc Society will work in the following four areas of the coast, which were selected

because of known presence of derelict gear, historical and current fishing activities (which confer a high likelihood of gear presence), and/or because of the potential for entanglement of wildlife species of concern, divers, and/or vessels:

- Humboldt County: State marine waters to 16-fathom isobath from Humboldt Bay north to Trinidad Head
- Monterey County: State marine waters to 16-fathom isobath from Elkhorn Slough to Point Lobos
- San Luis Obispo County: State marine waters to 16-fathom isobath from Point Estero to Point Buchon
- Los Angeles County: State marine waters to 16-fathom isobath surrounding Santa Catalina Island

The citizens of California – in particular, those who utilize the coastal ocean for boating, fishing and diving -- will benefit from this project through the increased safety provided by removal of underwater hazards. Individual fishermen will benefit from any gear that is returned to them. As well, non-fishing industries (e.g. the U.S. military, telecommunications companies) will benefit from the removal of gear that entangles equipment and structures or prevents its placement underwater. The state resources agencies will benefit by having a permanent program in place that reduces the loss of commercially and recreationally valuable marine organisms from state waters, and provides a higher level of protection for threatened and endangered species. Ultimately, it is the living marine resources and unique underwater habitats of California that will benefit from the removal of derelict gear that injures and kills animals or enshrouds and damages habitat.

California Derelict Fishing Gear Removal Program

OPERATIONS, ENVIRONMENTAL PROTECTION, AND MITIGATION MEASURES

I. DIVER SAFETY

All diving operations will be compliant with diving safety requirements of the appropriate state and federal occupational safety and health agencies. All divers contracted to conduct gear removal shall hold commercial diving certification. Gear removal operations will occur at depths less than 100 ft of water, which is within the no-decompression limits of the US Navy Standard Air Tables. At all times, at least one non-diving individual on the gear removal team (this person can be the boat operator) shall have current training in cardiopulmonary resuscitation and first aid.

All members of the gear removal team will use hardwire or wireless communications systems, with a surface communication box that will allow the diving supervisor to communicate with all divers underwater. All divers will have cutting instruments (knives, wire cutters, shears, seatbelt cutters) appropriate to the equipment being removed (i.e. appropriate to the material or gauge of the material). All divers will have a redundant air supply carried on their person; it shall be located in such a way as to allow easy access in the event that the primary air supply is cut off. Straps, hoses, clips, umbilicals, etc. will be taped and secured in such a way as to avoid diver entanglement in derelict gear.

II. ENVIRONMENTAL PRECAUTIONS AND MITIGATION

The purpose of removing derelict gear from the marine environment is to reduce threats to people, vessels, and marine wildlife, and to restore the underwater environment to a more natural state. The overall goal of the project is to benefit the marine environment, and not to negatively impact marine wildlife, marine habitats, or cultural resources of historical significance in the process of doing so.

A) Prioritizing gear for removal

Well in advance of removal operations in the field, derelict gear will be prioritized for removal based on criteria that allow for maximizing benefits for people, boats and wildlife while minimizing environmental impacts, costs, and hazards for the removal team.

Gear will be evaluated as to the likelihood (low, moderate or high) that the derelict gear is:

- Posing a threat to human safety
- Presenting a hazard to navigation
- Degrading underwater marine environment (physically or aesthetically)
- Threatening endangered or protected species

- Threatening non-threatened, non-endangered or non-protected species
- Impacting sensitive habitats

These evaluations will be balanced against criteria that gauge the geographic concentration of derelict fishing gear, the feasibility of removing it, and the cost of removing and disposing it.

The highest priority for removal will be given to gear that presents a high level of threat to human safety, navigation, endangered, protected or sensitive species, or sensitive habitats, and for which there are minimal environmental impacts of removal to species and habitats, and for which the logistics of removal are not impossible, dangerous or cost-prohibitive.

B) Training divers

Commercial SCUBA divers who are contracted for gear removal operations will first be trained by individuals experienced with derelict gear removal. Divers will be instructed on best practices with regards to underwater gear removal, in terms of maximizing diver safety and minimizing impacts to marine organisms and marine habitats. Training will be in the form of didactic presentations, videotape presentations, and on-board/in-water training during the early stages of their involvement in the program.

C) Minimizing impacts to organisms

To locate derelict pot and trap gear underwater, the SeaDoc Society will use sidescan sonar in the 600 kHz range to depict structures on the seafloor (using a Marine Sonics™ high frequency/ high resolution 600 kHz sidescan sonar transducer). This level of sonar is the same level used in medical diagnostics, i.e. the hydroacoustic energy applied by this project is about the same as that produced by ultrasound transducers used to image human fetuses *in utero*. Marine mammals typically have hearing ranges below 340 kHz; the 600 kHz frequency this project is using is above their documented hearing range. There are no documented biological effects off 600 kHz sonar on marine organisms, therefore the SeaDoc Society does not expect use of sonar for this project to biologically impact marine wildlife.

During derelict gear removal operations, it is possible that activities may occur in the vicinity of marine wildlife species as they undergo normal behaviors, such as migration, feeding, resting and breeding. Impacts could occur in the form of minimal and temporary:

- Forced evasive or hiding behavior
- Disruption of movement (direction or speed of travel)
- Interruption of resting, feeding or nesting behavior.

Such impacts will potentially occur only during at-sea operations, and have the greatest potential to occur when the diver is in the water, at the gear removal site. Because

these disruptions in normal behaviors will be minor and transient, the SeaDoc Society does not anticipate long-term or permanent biological impacts to marine organisms, either on an individual or a population level-scale. At no time will live animals be specifically handled or removed from the marine environment, unless they are entangled live in a net, in which case they will be disentangled and let go (or if seriously injured by the entanglement, will be transported live to a local marine wildlife rehabilitator).

D) Species of Concern

The following marine invertebrate, fish, bird and mammal species are federally and/or state-listed as endangered (FE, SE), threatened (FT, ST), or species of special concern (SSC), and are known to occur in our project areas: Humboldt (H), Monterey (M), San Luis Obispo (SLO), and Los Angeles (off Santa Catalina Island; SCI) Counties[8]. Derelict fishing gear will be removed in such a way as to minimize disturbance of these and all marine species. In addition to compliance with rules, regulations and recommendations regarding human interactions with these species (including permitting as necessary)[9], this project will minimize impacts to these listed species in the following additional ways:

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
MAMMALS					
blue whale	*Balaenoptera musculus*	FE	H, M, SLO, SCI	Feeds and migrates off coast; may transiently venture into shallow (<100 ft) water of project areas.	No purposeful vessel approach, use of sonar, or diver entry within 100 yards of animal visible at sea surface.
sperm whale	*Physeter macrocephalus*	FE	H, M, SLO, SCI	Year-round offshore, may transiently venture into shallow water of project areas.	Same as above
humpback whale	*Megaptera novaeangliae*	FE	H, M, SLO, SCI	Some year-round, some migrate off coast; may transiently venture into shallow water.	Same as above

[8] Data were compiled from the Department of Fish and Game's Wildlife Habitat Data Analysis Branch (www.dfg.ca.gov/whdab/pdfs/SPAnimals.pdf) and Habitat and Conservation Planning Branch (www.dfg.ca.gov/chpb/species), from the National Marine Fisheries Service Office of Protected Resources (http://www.nmfs.noaa.gov/pr), and from the DRAFT California Current Marine Bird Conservation Plan ver. 2.1 (Mills and Sydeman, Sept 2004, Point Reyes Bird Observatory, Stinson Beach, CA).

[9] E.g in accordance with marine wildlife viewing guidelines as recommended by the National Oceanic and Atmospheric Administration (http://sanctuaries.nos.noaa.gov/library/national/wwhandbook.pdf)

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
Steller sea lion	*Eumatopias jubatus*	FT	H, M, SLO, SCI	Rookeries at Sugarloaf Island, Cape Mendo-cino, SE Farallon Island and Ano Nuevo Island; non-breeding adults migrate along coast and offshore.	Project activities are outside the 3-mi no-approach zone around rookeries; no purposeful vessel approach, use of sonar, or diver entry within 100 yards of an animal at haul-out or visible at sea surface.
Guadalupe fur seal	*Arctocephalus townsendii*	ST, FT	SCI	Breeds primarily in Mexico (one pup born on San Miguel Island in 1997), occasionally seen in Channel Islands.	Project activities distant from known pupping site in CA; no vessel approach, use of sonar, or diver entry within 100 y. of animal at haul-out or at sea surface.
Southern sea otter	*Enhydra lutris nereis*	FT	M, SLO	Endemic to California, core range within the Monterey Bay area and Big Sur coast, but sightings north to Half Moon Bay and south of Pt. Conception; translocated individuals living at San Nicolas Island	No purposeful vessel approach, use of sonar, or diver entry within 100 yards of an animal visible at sea surface.
BIRDS					
Marbled murrelet	*Brachyramphus marmoratus*	SE, FT	H, M	Nests inland in old-growth redwood forest from Eureka to Oregon border, and from Half Moon Bay to Santa Cruz; feeds near-shore, distribution on water varies seasonally	No purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
Rhinoceros auklet	*Cerorhinca monocerata*	SSC	H, M	Breeding colonies at Castle Rock, Farallon Islands, and Ano Nuevo Island; ranges offshore year-round..	Nocturnal, burrow-nesting behavior makes likelihood for disturbance low; no purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
Tufted puffin	*Fratercula cirrhata*	SSC	H, M	Small numbers of birds breeding at multiple sites along Central and Northern CA coastline.	No vessel approach within 100 yds of colonies during nesting season; no purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
California gull	*Larus californicus*	SSC	H, M, SLO, SCI	Breeds inland, but ranges and feeds along entire coast.	No purposeful vessel approach, use of sonar, or diver entry within 50 yds of an animal visible at sea surface.
Fork-tailed storm-petrel	*Oceanodroma furcuta*	SSC	H	Colony off Del Norte County; forages in nearshore and offshore.	Nocturnal, burrow-nesting behavior makes likelihood for disturbance during day low; breeding colony outside project area; no purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
Ashy storm-petrel	*Oceanodroma homochroa*	SSC	H, M, SLO, SCI	Endemic in California; colonies in Central and Southern CA (but not on Catalina Island); forage at sea and migrate along coastline	No vessel approach within 100 yds of colonies during nesting season; no purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
Black storm-petrel	*Oceanodroma melania*	SSC	H, M, SLO, SCI	One nesting colony on Santa Barbara Island; forage at sea and migrate along coastline.	Nocturnal, burrow-nesting behavior makes likelihood for disturbance during day low; breeding colony outside project area; no purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
California brown pelican	*Pelecanus occidentalis*	SE, FE	H, M, SLO, SCI	Nest in Channel Islands (although not on Catalina); range over entire coastline year-round, using shoreline and offshore rocks for roosting sites.	Breeding colonies outside project area; no vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface or roosting on land.
Double-crested cormorant	*Phalacrocorax anritus*	SSC	H, M, SCI	Multiple breeding sites along CA coast, all in decline.	Same as above
California least tern	*Sterna antillarum*	SE, FE	M, SLO, SCI	Nest along CA coast from San Francisco Bay south.	No vessel approach within 100 yds of colonies during nesting season; no vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface or roosting on land.
Elegant tern	*Thalasseus elegans*	SSC	SCI	Only known breeding colony in US in southern San Diego Bay	No vessel approach, use of sonar, or diver entry within 50 yd animal visible at sea surface.

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
Xantu's murrelet	*Synthliboramphus hypoleucas*	ST[10]	SCI	Nest on Channel Islands (but not on Catalina Island); some may overwinter in southern CA.	Breeding colonies outside project area; no vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
Fish and Invertebrates					
tidewater goby	*Eucyclogobius newberryi*	FE, SSC	H, M, SLO, SCI	Endemic to brackish water/estuarine habitats along California coasts in water less than 1 meter in depth.	No project activities (gear removal) in <1 m depth brackish water/estuarine habitat within range of this species.
Pink salmon	*Onchorhynchus gorbuscha*	SSC	H, M	Extremely rare in CA (southern end of range)	No project activities (gear removal) in marine water within 500 yards of entrances to spawning rivers during spawning season.
Chum salmon	*O. keta*	SSC	H	Rare in California; historically abundant from San Francisco Bay north.	Same as above
Coho salmon	*O. kisutch (multiple runs)*	SSC, SE, FT	H, M	Populations spawning in coastal rivers	Same as above
Steelhead	*O.mykiss (multiple runs)*	SSC, FT, FE	H, M, SLO, SCI	Spawns in rivers along entire CA coastline.	Same as above
Chinook salmon	*O. tshauytscha (multiple runs)*	SSC, ST, FT, FE	H, M	Spawns in coastal rivers and in Sacramento River delta.	Same as above
White abalone	*Haliotus sorenseni*	FE	SCI	Most at depths exceeding 75 feet, from Point Conception south	No removal of derelict gear within 10 yards of an individual.

[10] Pending before California Fish and Game Commission.

Common Name	Scientific Name	Listing Status	Project Area	Use of Area	Additional Protective Actions
REPTILES					
Green turtle	*Chelonia mydas*	FT	H, M, SLO, SCI	Circumglobal in distribution, including California coast; no breeding colonies in CA.	No purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
Leatherback turtle	*Dermochelys coracea*	FE	H, M, SLO, SCI	Circumglobal in distribution, including California coast; prefers deeper water (greater than 600 ft); no breeding colonies in CA.	Same as above
Loggerhead turtle	*Caretta caretta*	FT	H, M, SLO, SCI	Circumglobal in distribution, including California coast; no breeding colonies in CA.	Same as above
Olive ridley turtle	*Lepidochelys olivacea*	FT	H, M, SLO, SCI	Same as above	Same as above

The decision as to whether the process of removal of gear within the known range of these species of concern and/or at a sensitive or critical time of the year may be too disruptive will be made on a site-by-site basis by the derelict gear removal project leader in consultation with the federal, state or local agency personnel who have jurisdictional authority and knowledge of the particular species and/or habitat which may be affected by the derelict gear removal activities. Because the intent of the project is to enhance marine habitat and remove hazards to marine organisms, training materials and in-water training will stress the need to prevent disturbance of marine life and destruction of existing habitat through project activities (see Section III).

E) Protected Areas

Marine managed areas are biologically unique, special parts of the ocean that have been designated as off-limits to certain kinds of uses in order to protect habitat and species. California's marine managed areas are designated and/or managed by State Parks, Dept. of Fish and Game, the National Marine Sanctuaries, State Lands Commission, State Water Resources Control Board, and by some universities. This project encompasses several marine managed areas which each have special provisions for activities that can and cannot occur within them[11]. The following marine

[11] McArdle, D.A. (editor). 1997. California Marine Protected Areas. California Sea Grant College System, Publication No. T-039. University of California, La Jolla, California. 267 p.

managed areas occur within our study area. The SeaDoc Society will obtain permission from the jurisdictional agency prior to gear removal in these areas, and will ensure no negative environmental impact on these areas by using environmentally sensitive gear removal methods (see Section III):

Site Name	Designation[12]	Project Area
Kelp beds at Trinidad Head	ASBS	Humboldt County
Point Lobos State Marine Reserve	ASBS, SRes	Monterey County
Carmel Bay State Marine Conservation Area	ASBS, SMCA	Monterey County
Pacific Grove State Marine Conservation Area	ASBS, SMCA	Monterey County
Hopkins State Marine Reserve	ASBS, SRes	Monterey County
Monterey Bay National Marine Sanctuary	NMS	Monterey County
California Sea Otter Game Refuge	SRef	Monterey County, San Luis Obispo County
Atascadero Beach State Marine Conservation Area	SMCA	San Luis Obispo County
Morro Beach State Marine Conservation Area	SMCA	San Luis Obispo County
Lovers' Cove State Marine Conservation Area	SMCA	Santa Catalina Island (Los Angeles County)
Farnsworth Bank State Marine Conservation Area	SMCA	Santa Catalina Island (Los Angeles County)
Arrow Pt to Lion Head Invertebrate Area	State Special Closure	Santa Catalina Island (Los Angeles)
Catalina Marine Science Center State Marine Reserve	SRes	Santa Catalina Island (Los Angles County)
Santa Catalina Island (5 sites): -Ishtmus Cove to Catalina Head -No. end of Little Harbor to Ben The SeaDoc Societyston Pt -Farnsworth Bank Ecological Reserve -Binnacle Rock to Jewfish Point	ASBS	Santa Catalina Island (Los Angeles County)

In all project areas, divers will minimize impacts to the habitat by: excavating (by hand-digging only) only the part of the seafloor bed that is in the immediate vicinity of the derelict gear and is embedding the gear in the seafloor, immediately replacing any sediments and plants removed from the gear removal site as soon as the gear has been freed; by carefully moving through the kelp forests or walking on the seafloor in a manner that minimizes damage to plants; and by not removing any plants from the water unless they are attached to the derelict gear.

[12] Areas of Biological Significance (ASBS): State Water Resources Control Board
State Reserves, Refuges (SRes; SRef): California Department of Fish and Game
State Marine Conservation Areas (SMCA): California Department of Fish and Game
National Marine Sanctuaries (NMS): National Oceanic and Atmospheric Administration

If the process of removing the gear is going to damage habitat more than the presence of the derelict gear, the gear will not be removed, and/or it will be modified in place to reduce its harmful effects. For example, net gear embedded in sediment that cannot be easily removed by hand can be cut and trimmed where exposed to reduce its potential for entangling organisms; a trap can be secured in an open position to prevent confining of trapped organisms. At no times will gear that is completely or partially embedded in the seafloor or encrusted on a reef be removed by mechanical means (e.g. a winch on a surface vessel), because removal would be damaging to the substrate and/or would suspend sediment, and because mechanical removal has the potential to damage the gear in such a way as to make it difficult to impossible to remove what gear remains in the water.

Derelict gear that has been in the marine environment for a very long time may now serve as habitat to organisms that have taken up residence around or on the gear. Such gear has become such an integral part of the substrate that to remove it might damage habitat and potentially reactivate sections that were benign. If the gear cannot be removed in such a way as to minimize disturbance to these plants and animals, it should be left in place (depending on the potential hazard it poses to marine life or humans).

Removal efforts that could disturb sediment will not occur in areas of known contamination so as to avoid the suspension of contaminants in the water column. However, if removal of the gear has been identified as a high priority because of known damage or hazard posed by the gear, then the gear removal team will meet with the appropriate regulatory agencies to determine the best methods for removal.

F) Cultural Resources

Sunken vessels may be encountered. Locations of sunken vessels are maintained by the State Lands Commission[13]. Gear removal operations will occur on/around sunken vessels only if the presence of derelict gear on the sunken vessel has been ranked as a high priority for removal based on its potential to endanger divers or boats, or to entangle marine wildlife. Permission will be obtained from appropriate agencies (e.g. State Lands Commission, State Parks) prior to gear removal from sunken vessels. Sunken vessels may be imaged during use of sidescan sonar during gear location activities; location information and imagery will be shared with the U.S. Coast Guard, State Parks, State Lands Commission, and the Department of Fish and Game's Office of Spill Prevention and Response.

[13] http://shipwrecks.slc.ca.gov/

III. GEAR REMOVAL OPERATIONS

A) Prior to field operations

At least 21 days prior to a planned derelict fishing gear removal operation, the project coordinator will submit a Notification of Derelict Fishing Gear Removal Operation with the Department of Fish and Game's Marine Region managers, as well as to any other regional, state or federal agencies with management authority for living marine resources and marine habitats in the area of gear removal, as well as for vessel traffic managers (e.g. harbormasters, U.S. Coast Guard). Agencies will be asked to contact the project coordinator with any concerns regarding plans for gear removal, and the project coordinator will respond in a timely manner to those concerns, modifying or altering the gear removal operation plan appropriately.

B) General conditions

Derelict pot/trap removal operations will not be conducted in areas where in-season commercial pot/trap fisheries are underway to prevent conflicts with commercial fisherman who are legally and appropriately deploying pot/trap gear.

Only professionally-certified, commercial divers (members of the Association of Dive Contractors) will engage in derelict gear removal operations. The University of California, Davis Wildlife Health Center will contract for these services. No individual will undertake any derelict gear removal activity that exceeds his/her experience and certification. All vessel operation will comply with U.S. Coast Guard regulations. The gear removal team will be responsible for giving appropriate notice to state or local agencies and for obtaining permission from private landowners to gain access to clean-up areas.

C) Gear removal from the intertidal*:*

Derelict gear in the intertidal zone is often encrusted on rocks or on woody debris, or may be partially buried in the sandy or muddy bottom. Derelict fishing gear found in the intertidal zone can usually be removed by hand with shovels and/or cutting instruments at low tide, either by foot from the beach or shoreline, or from a shallow draft vessel. If removal efforts require modification of the beach (i.e. digging into the sand), the modification (e.g. the hole) will be filled after the gear has been removed. If removal efforts require the manipulation of rocks or woody debris, best efforts will be made to replace the debris to its original position after gear removal. Heavy equipment (vehicles) will not be used to remove gear from the intertidal zone because of potential damage to the beach or shoreline.

D) Gear removal from shallow water < 16 fathoms (100 ft):

Dive teams will be comprised of a minimum of three individuals: a diver working on removal of the gear, a support diver standing off the gear to be ready to assist the working diver if entanglement occurs, one dive supervisor, and a boat skipper (the supervisor and skipper can be the same individual). If surface-supplied air is being used, the team shall consist of a minimum of four people, with one person serving as tender on the dive platform, and the dive supervisor or boat operator acting as the safety diver. Vessels will be secured by a minimum of a two-point mooring system, in a position that allows for easy access to the derelict gear removal site. The underwater team will work upcurrent from the derelict gear, so that when it is separated it will tend to float away from the divers rather than towards or onto them.

Divers will hand-remove net and line gear from the seabed by physically cutting/ detaching encrusted or severely tangled lines or nets, and/or by loosening and/or dis-embedding pots and traps. Gear can be secured and removed in one or more of the following ways: 1) bundling the separated gear in sections and attaching the removed gear to air bags to lift it to the surface; 2) a net that is "flagging" in the water column can be freed from its entanglement or encrustation by step-wise cutting at its base of attachment, and bundling the net as it is detached; and 3) "neutralize" nets or lines that are hopelessly entangled by removing those parts of the net that are the most potentially hazardous, or securing parts of the net in closed-down positions with cable ties to make sure these parts of the derelict net do not become active at some point in the future. Multiple airbags can be attached to sections of the gear to apply upward tension on the gear to facilitate its separation from the seabed or reef. In some circumstances, it may be advantageous to raise gear from the seabed by attaching a section of already freed/raised gear to an on-board winch on the vessel, but the winching should occur once divers are out of the water. In the case of pots and traps, the gear should be loosened from the seabed via hand-digging or other tools, and a grapple attached for hauling the gear to the surface via an on-board winch. The amount and nature of any gear left behind shall be described and reported, including GPS coordinates.

E) Disposal of derelict gear

A plan for deposition of gear will be made before the removal operation, to ensure rapid and appropriate deposition of the gear once it is out of the water. Best efforts will be made to repatriate derelict gear clearly labeled with an owner name. Gear that cannot be repatriated will be either recycled or disposed. Recycling of clean gear will be done at pre-identified fishing gear at ports or marinas near the removal site that have recycling stations. Disposal of gear will occur at public landfills only, and not in public waste containers. To ease disposal, derelict gear will be cut into manageable pieces, and bundled to decrease volume. Arrangements for appropriate transport and disposal of recovered derelict gear will be made prior to the removal (e.g. a vehicle capable of hauling tons of recovered material safely) and nearby disposal sites will be identified prior to field activities.

California Derelict Fishing Gear Removal Program

Initial Study Checklist

I. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista? NO IMPACT

b) Substantially damage scenic resources, including but not limited to trees, rock outrcroppings, and historic buildings within a state scenic highway? NO IMPACT

c) Substantially degrade the existing visual character or quality of the site and its surroundings? LESS THAN SIGNIFICANT IMPACT

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? NO IMPACT

Discussion of Aesthetics

The program will not damage above-water scenic resources, and will in fact improve underwater aesthetics by removing man-made debris from natural sites. Short-term impacts on the aesthetics of underwater areas appreciable to recreational divers may occur in the form of very temporary increases in turbidity due to suspension of sand or sediments. Gear removal may result in ephemeral changes in the appearance of underwater communities, such as changes in the density and composition of encrusting organisms on rocks that may occur when derelict gear that has become partially attached to substrates is removed. When accomplished, derelict fishing gear removal will ultimately result in substantial improvements in underwater aesthetics due to removal of unnatural debris that is blighting the landscape and restoration of underwater communities to more natural states.

Finding: LESS THAN SIGNIFICANT IMPACT

II. AGRICULTURAL RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? NO IMPACT

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? NO IMPACT

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? NO IMPACT

Discussion of Agricutural Resources
The derelict fishing gear removal program will be implemented in state marine waters only, and therefore will not adversely impact agricultural values or result in a substantial alteration in the present or planned use of the area or a reduction in the acres devoted to agriculture in the terrestrial environment. Derelict fishing gear removal efforts will not be conducted within the boundaries of a mariculture operation, unless the mariculture operator requests that the gear be removed and/or the gear has been ranked as a high priority for removal because of impacts to species or habitats of concern, in which case gear removal will occur with full disclosure to, and in cooperation with, the mariculture operator.

Finding: NO IMPACT

III. AIR QUALITY
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan? NO IMPACT

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? NO IMPACT

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors? NO IMPACT

d) Expose sensitve receptors to substantial pollutant concentrations? NO IMPACT

e) Create objectionable odors affecting a substantial number of people? LESS THAN SIGNIFICANT IMPACT

Discussion of Air Quality
Program activities will result in short-term diesel emissions from boat engines and exhaust from vehicles, originating from usual and customary operation of vessels at sea, and of road vehicles (for transport of derelict gear to disposal sites). Local air quality control districts will be consulted prior to gear removal operations; if air quality is

poor and the air quality control districts are recommending minimal use of vehicles, gear removal operations will be postponed until a day when air quality has improved. As well, program activities may result in transient production of objectionable odors for the public and for project personnel from the mud and sediment adhering to derelict fishing gear when it is first brought up on deck from underwater and/or stored on deck overnight prior to disposal. Gear will be hosed off immediately to minimize odors for the public and the field crew. Once recovered from the water, derelict gear may, over time in ambient air, produce objectionable odors for the public and project personnel as microorganisms encrusted on the gear biodegrade. Derelict gear will be disposed of at a landfill as soon after removal from the water as possible, so as to minimize exposure of the public and the field crew to odors.

Mitigation Measures for Air Quality:

- In order to minimize impacts to air quality, local air quality control districts will be consulted prior to gear removal operations; if air quality is poor and minimal use of vehicles is recommended, gear removal operations will be postponed until a day when air quality has improved.

- In order to minimize production of objectionable odors, gear that has been removed from the water will be hosed off on deck, and transported as soon as possible to minimize exposure of the public to objectionable odors.

Finding: LESS THAN SIGNIFICANT IMPACT

IV. BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? POTENTIALLY SIGNIFICANT IMPACT WITHOUT MITIGATION

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? POTENTIALLY SIGNIFICANT IMPACT WITHOUT MITIGATION

c) Have a substantial adverse effect on federally protected the wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? LESS THAN SIGNIFICANT IMPACT

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? POTENTIALLY SIGNIFICANT IMPACT WITHOUT MITIGATION

Discussion of Biological Resources:
The intent of this program is to restore underwater marine habitats to their natural state through removal of man-made materials, and to reduce hazards to marine life due to entanglement or trapping. Gear removal operations may take place in marine habitats of concern, and/or within the range of species of concern. Program activities will be conducted with the utmost sensitivity to the integrity of underwater marine habitats and to living marine organisms. Any effects on biological resources will be localized and temporary. Nevertheless, all mitigation measures will be taken to minimize and/or prevent damage to habitat or loss of marine organisms (as described in our Initial Study, Part II, Section B. *Environmental Precautions*), and will therefore have no significant adverse impacts on biological resources.

Potential impacts on species or habitats either directly or indirectly through habitat modifications will be mitigated in the following ways:

Mitigation Measures for Biological Resources:

- In order to be prevent disruption of normal behaviors or ecology of any species or habitats of concern, the gear removal team will first contact local state and/or federal agencies for information on the presence of any species of concern and of habitats of special concern in the vicinity of the proposed derelict gear removal, and gear removal operations will be directed away from these areas and/or rescheduled so as not to take place at a time of year when these habitats are critical for certain species.
- In order to prevent impacts to species or habitats by divers in the process of removing gear, divers who will be engaged in underwater removal of derelict fishing gear will be extensively trained in methods for removal that prevent damage to habitats and impacts to biota; they will be trained to disentangle and/or detach live animals and vegetation from the gear at the site of gear removal before transferring the gear to the surface for loading onto a vessel; they will be trained to judge situations in which there is the potential for gear removal to damage the marine environment to a degree that exceeds the damage caused by the presence of the gear alone, in which case they will be able to make a decision as to whether it is more appropriate to leave the gear in place and/or disabled it in place instead of removing it.
- In order to minimize disturbance of marine organisms, under no circumstances will live organisms be handled or removed from the marine environment, unless they are entangled, in which case they will be disentangled and set free.
- In order to provide best-achievable care for any live marine mammal, bird or reptile that is found entangled in a net and determined to have a life-threatening

injury, appropriate marine wildlife rehabilitators will be notified and the animal transported to their facility.
- In order not to disrupt the natural decomposition of dead organisms in the marine environment, any dead organisms caught in derelict gear will be censused on board by the team biologist, and then returned to the water to resume decomposition and degradation by scavengers.
- In order to prevent damage to underwater habitat, derelict fishing gear that is buried in sand or mud or gravel that cannot be removed with simple hand digging by divers will be reduced by cutting it as close to the surface of the substrate as possible, leaving remaining gear buried in place, so that the seafloor habitat is not drastically altered in the process of removing gear. Under no circumstances will mechanical means (e.g. a surface winch) be used to dislodge buried or entangled or encrusted gear from marine habitats shallower than 100 feet in depth, to avoid permanent and extensive damage to habitats.

Finding: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION MEASURES

V. CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? NO IMPACT

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? NO IMPACT

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? NO IMPACT

d) Disturb any human remains, including those interred outside of formal cemeteries? NO IMPACT

Discussion of Cultural Resources:
Cultural resources which may be encountered underwater will be sunken vessels, which have been documented in all of our project areas[14]. If derelict gear is located on, in, or in the vicinity of a sunken vessel, prior to removal the project coordinator will contact the State Lands Commission (SLC) and State Parks and Recreation (State Parks) to determine whether or not the vessel is an historic resource. If it is, then the project coordinator will consult with SLC and/or State Parks as to the feasibility of gear removal in ways that prevent impact to the integrity of the resource. If impact is unavoidable, then the gear will be left in place. If impact can be minimized and if the gear has been ranked as a high priority for removal based on its potential to endanger divers or boats,

[14] Dept of Fish and Game's Office of Spill Prevention and Response

or to entangle marine wildlife, then the project team will work closely with SLC and/or State Parks in carefully removing gear from the sunken vessel without impacting the resource. This project may generate new information about location of sunken vessels (via sonar imaging for presence of derelict fishing gear), in which case this information will be promptly transferred to agencies with jurisdictional authority (e.g. U.S. Coast Guard, California Department of Fish and Game, State Lands Commission, U.S. Army Corps of Engiineers, and State Parks and Recreation) for determination of appropriate dissemination of location information to other agencies or the public.

Mitigation Measures for Cultural Resources

- In order to ensure that gear removal activities do not impact the integrity of a sunken vessel, gear removal on or in the near vicinity of sunken vessels will not occur until the State Lands Commission or State Parks and Recreation have been consulted as to feasible gear removal methods that will prevent alteration of those physical characteristics that account for its inclusion in the historical register.

Finding: NO IMPACT

VI. GEOLOGY AND SOILS

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known faulty? Refer to Division of Mines and Geology Special Publication 42. NO IMPACT

ii) Strong seismic ground shaking? NO IMPACT

iii) Seismic-related ground failure, including liquefaction? NO IMPACT

iv) Landslides? LESS THAN SIGNIFICANT IMPACT

b) Result in substantial soil erosion or the loss of topsoil? NO IMPACT

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? LESS THAN SIGNIFICANT IMPACT

d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? NO IMPACT

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? NO IMPACT

Discussion of Geology and Soils
Derelict fishing gear removal will not require the use of any processes or equipment capable of having seismic-level impacts on the seafloor. On a very localized level, removal of derelict gear may result in the displacement of seafloor sediments (mud, sand) at the work site, either through inadvertent dislodging (e.g. via footsteps of divers) or purposeful removal of sediments in the immediate vicinity of the debris via hand-digging in order to facilitate its removal if it has become partially embedded in sediments. There is the potential for these activities to cause sediments in the work area to become less stable and more prone to shifting or small-scale landslides, especially if sediment manipulation occurs on sloping surfaces. Divers will replace sediments after gear has been removed (e.g. refill any pits in the seafloor created after gear removal) in order to minimize sediment destabilization, and will avoid working on sloping soft-bottom substrates.

Mitigation Measures for Geology and Soils:

- In order to minimize sediment destabilization and alterations in the contours of the seafloor, divers will replace sediments after the gear has been removed, e.g. refill any pits in the seafloor created after gear removal.

Finding: LESS THAN SIGNIFICANT IMPACT

VII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste? NO IMPACT

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? NO IMPACT

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? NO IMPACT

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? NO IMPACT

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people resident or working in the project area? NO IMPACT

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? POTENTIALLY SIGNIFICANT IMPACT WITHOUT MITIGATION

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? NO IMPACT

h) Expose people or structures to a significant risk of loss, injury or death involving wildlands fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? NO IMPACT

Discussion of Hazards and Hazardous Materials
Program activities will not require the transport, use or disposal of hazardous waste. Program activities, which will take place in the marine environment, will therefore not take place within 0.25 miles of a school or within an airport land use plan or a private airstrip, and will not pose a risk due to wildlfires. Normal and customary operations of vessels at sea always present a potential risk of accidental release of petroleum products into the marine environment due to a vessel accident: in the event that the vessel contaminates the marine environment with oil, the vessel captain shall notify the U.S. Coast Guard immediately, so that containment and clean-up procedures can be implemented. Because removal of derelict fishing gear in areas of known sediment contamination could resuspend hazardous materials in the water column or expose them in the substrate, program activities will not take place in areas of known sediment contamination.

Mitigation Measures for Hazards and Hazardous Materials:

- In order to prevent the re-suspension of hazardous materials in contaminated sediments, derelict gear will not be removed from areas of known sediment contamination.

Finding: NO IMPACT

VIII. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements? NO IMPACT

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lothe SeaDoc Societyring of the local groundwater table level (e.g. the production rate of pre-existing nearby the SeaDoc Societylls would drop to a level which would not support existing land uses or planned uses for which permits have been granted? NO IMPACT

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? NO IMPACT

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? NO IMPACT

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? NO IMPACT

f) Otherwise substantially degrade water quality? POTENTIALLY SIGNIFICANT IMPACT WITHOUT MITIGATION

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard deliniation map? NO IMPACT

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? NO IMPACT

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? NO IMPACT

j) Inundation by seiche, tsunami, or mudflow? NO IMPACT

Discussion of Hydrology and Water Quality
Program activities will take place entirely in the marine environment, and therefore will have no impact on terrestrial watersheds, drainages, freshwater rivers or streams, or groundwater. This project may temporarily increase turbidity of the water in the immediate vicinity of derelict gear during removal activities with the temporary dislodging of mud or sand from the seafloor, and with the hosing off (with seawater) of small amounts of mud or sand or sediment adhering to derelict fishing gear when it is first brought up on deck from underwater. These changes in water quality will be extremely minor and transient in nature, and will resolve with normal settling of particles out of the water column and with currents. Nevertheless, approval will be obtained from the Regional Water Quality Control Board prior to gear removal, to ensure that the input of sediment or mud does not conflict with regional regulations on vessel discharge into

marine water. Gear removal will not occur in areas of known sediment contamination, so as to avoid suspension of contaminated materials in the water column.

Mitigation Measures for Hydrology and Water Quality

- In order to ensure that on-deck gear rinsing activities are not in violation of regional regulations regarding vessel discharge into the marine environment, approval will be obtained from the Regional Water Quality Control Board prior to gear removal.

- To ensure that the water column is not contaminated with suspension of contaminants from sediment, gear removal activities will not take place in areas of known sediment contamination.

Finding: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION MEASURES

IX. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community? NO IMPACT

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environment effect? LESS THAN SIGNIFICANT IMPACT

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? LESS THAN SIGNIFICANT IMPACT

Discussion of Land Use and Planning

Program activities will take place entirely within the marine environment, and will not conflict with any general, specific or local land use plan or zoning ordinance that is designed to minimize environmental effects on land. As well, the program will not conflict with an applicable HCP, NCCP or Local Coastal Plan (LCP), which focus on terrestrial land use. Marine protected areas or underwater parks may have special habitat protection measures that may have bearing on derelict gear removal operations being conducted in these areas. The SeaDoc Society will mitigate this potential impact by contacting the appropriate management agency prior to gear removal to obtain approval for the gear removal operation and ensure that planned activities do not conflict with any management or conservation measure or activity within the protected area (see Initial Study Part II, Section b. Part *vi – Marine Protected Areas*).

Mitigation Measures for Land Use and Planning:

- In order to ensure that project activities do not conflict with special habitat or species protection measures of a marine protected area, approval will be obtained from the appropriate management agency prior to project activities.

Finding: LESS THAN SIGNIFICANT IMPACT

X. MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? NO IMPACT

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? NO IMPACT

Discussion of Mineral Resources
Program activities will not involve the removal of any mineral resources from the marine environment.

Finding: NO IMPACT

XI. NOISE

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? NO IMPACT

b) Exposure of persons to or generation of excessive ground-borne vibration or groundborne noise levels? NO IMPACT

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? NO IMPACT

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? LESS THAN SIGNIFICANT IMPACT

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? NO IMPACT

f) For a project within the vicinity of a private airstrip, would the project expose people residing or workin in the project area to excessive noise levels? NO IMPACT

Discussion of Noise
Program activities, which will take place offshore in the marine environment, will not be heard on land, and will not take place within an airport land use plan or within two miles of a public airport or public use airport, or in the vicinity of a private airstrip. Normal and customary operations of vessels at sea will temporarily generate an expectable and usual level of noise related to the boat engine. As well, the two-way radio system in place to communicate with divers typically broadcast through an on-deck speaker so that all personnel on-board can monitor the divers' communications (for safety and operations); this may generate a temporary increase in ambient noise levels for individuals on boats in the vicinity, but is not expected to be substantial or disruptive, or to be audible on shore.

Finding: LESS THAN SIGNIFICANT IMPACT

XII. POPULATION AND HOUSING

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? NO IMPACT

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? NO IMPACT

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? NO IMPACT

Discussion of Population and Housing
Program activities will take place entirely in the marine environment and will therefore have no impact on populations, growth or housing. Disposed gear will occupy space at local public landfills; it is expected that this will be mitigated via established fee structures at the landfills which appropriately confer levels of cost burden on entities that wish to dispose of large quantities of waste at public landfills.

Finding: NO IMPACT

XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilties, need for new or physically altered governmental facilities, the construction of which could cause significant

environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection? NO IMPACT
Police Protection? NO IMPACT
Schools? NO IMPACT
Parks? NO IMPACT
Other public facilities? NO IMPACT

Discussion of Public Services
Program activities will not require the construction of new or the alteration of existing government facilties, and therefore will have no adverse impact on the provision of public services.

Finding: NO IMPACT

XIV. RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? NO IMPACT

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? NO IMPACT

Discussion of Recreation
Program activities may occur within underwater parks and reserves where derelict fishing gear removal has been identified as a priority. This is not likely to result in an increase in physical deterioration of the recreational area as long as rules and regulations governing proper use of the park are enforced by park managers. To the extent that derelict gear removal results in reduced hazards to boaters, substantial increases in diver safety, and/or improvements in underwater aesthetics, the program may increase the use of these state recreational areas. On the whole, program activities are expected to enhance recreational opportunities for ocean users through increase safety and enhanced aesthetics.

Finding: NO IMPACT

XV. TRANSPORTATION/TRAFFIC

Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic lad and capacity of the street system (i.e. result in a substantial increase in either the

number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? LESS THAN SIGNIFICANT IMPACT

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? NO IMPACT

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? NO IMPACT

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? NO IMPACT

e) Result in inadequate emergency access? NO IMPACT

f) Result in inadequate parking capacity? NO IMPACT

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)? NO IMPACT

Discussion of Transportation/Traffic
Program activities will take place entirely in the marine environment, and will not substantially alter traffic flow, roadway capacity, or roadway hazards. It may be necessary at times to use a single large vehicle (e.g. a 1-2 ton-capacity flatbed truck or dump truck) to transport removed gear from a harbor to a landfill site or recycling location; in such instances, the SeaDoc Society will strive to make such trips during non-rush hours and will be sure to use roadways of appropriate capacity for such large vehicles.

Mitigation Measures for Transportation/Traffic:

- To ensure that utilization of a single large transport vehicle is required for disposal of removed gear at a local landfill, all efforts will be made to make this trip during non-rush hours, and to use roadways of appropriate capacity for the vehicle.

Finding: LESS THAN SIGNIFICANT IMPACT

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? NO IMPACT

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? NO IMPACT

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilties, the construction of which could cause significant environmental effects? NO IMPACT

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed? NO IMPACT

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? NO IMPACT

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? LESS THAN SIGNIFICANT IMPACT

g) Comply with federal, state, and local statutes and regulations related to solid waste? NO IMPACT

Discussion of Utilities and Service Systems
Program activities will not generate wastewater, nor require construction of new water, wastewater treatment, or stormdrain facilities. The vessel's freshwater supply will be adequate for crew needs, and an on-deck saltwater hose will be used for washing down the deck and removed gear. All efforts will be made to repatriate derelict gear identifiable to owner, or to recycle gear if gear recycling stations are accessible locally. Gear that cannot be repatriated or recycled will be disposed of in a landfill. Prior to gear removal efforts, all local landfills will be contacted and it will be determined beforehand whether they have adequate capacity (in terms of total volume or weight) and permits to accept and dispose of removed gear. All federal, state and local statutes and regulations related to solid waste disposal will be strictly adhered to.

Mitigation Measures for Utilities and Service Systems:

- To minimize inputs to public landfills, all efforts will be made to repatriate derelict gear identifiable to owners, or to recycle gear at gear recycling stations.

- To ensure that disposal needs at public landfills do not exceed landfill capacity, local landfills will be contacted prior to gear removal efforts to ensure that the landfill can accept and dispose of the removed gear.

Finding: LESS THAN SIGNIFICANT IMPACT

California Derelict Fishing Gear Removal Program

SUMMARY OF MITIGATION MEASURES AND MONITORING

As identified in the Initial Study, certain project activities have been modified in order to decrease, minimize or eliminate potential effects on the environment. Specifically, the following mitigation measures have been incorporated into the project plan in order to reduce or prevent impacts to the following species, environmental components, or ecological services:

Potential for Impact	**Mitigation Measure**
Threatened and endangered species, general	Prior to engaging in derelict gear removal, the local state and/or federal agencies will be contacted for information on the presence of any species of concern and of habitats of special concern in the vicinity of the proposed derelict gear removal, and removal operations will be directed away from these areas and/or rescheduled so as not to take place at a time of year when these habitats are critical for certain species
Injured wildlife	If a live marine mammal, bird or reptile is determined to have a life-threatening injury as determined by the gear removal team, appropriate marine wildlife rehabilitators will be notified and the animal transported to their facility
Large cetaceans	No purposeful vessel approach, use of sonar, or diver entry within 100 yards of animal visible at sea surface
Pinnipeds	No vessel approach, use of sonar, or diver entry within 100 yards of a rookery, haul-out site, or of an individual animal(s) visible at the sea surface
Southern sea otters	No purposeful vessel approach, use of sonar, or diver entry within 100 yards of an animal visible at sea surface.
Threatened or endangered marine birds	No purposeful vessel approach, use of sonar, or diver entry within 100 yards of a breeding colony or within 50 yards of a bird visible at the sea surface.
Tidewater goby	No project activities (gear removal) in <1 m depth brackish water/estuarine habitat within range of this species
Salmonids	No gear removal in marine water within 500 yards of entrances to spawning rivers during spawning season.
White abalone	No removal of derelict gear within 10 yards of an individual(s)
Sea turtles	No purposeful vessel approach, use of sonar, or diver entry within 50 yards of an animal visible at sea surface.
Underwater habitat	If the process of removing the gear is going to damage habitat more than the presence of the derelict gear, the gear will not be removed, and/or it will be modified in place to reduce its harmful effects.

Potential for Impact	Mitigation Measure
Contaminated sediment areas	Removal efforts that could disturb sediment will not occur in areas of known contamination so as to avoid the suspension of contaminants in the water column; if removal of the gear has been identified as a high priority because of known damage or hazard posed by the gear, then the gear removal team will meet with the appropriate regulatory agencies to determine the best methods for removal.
Seafloor sediments	In order to minimize sediment destabilization and alterations in the contours of the seafloor, divers will replace sediments after the gear has been removed, e.g. refill any pits in the seafloor created after gear removal.
Accidental oil spill	In order to minimize contamination of the marine environment by an accidental release of petroleum products from the vessel, the US Coast Guard shall be contacted immediately to implement containment and clean-up efforts as soon as possible.
Air quality	Local air quality control districts will be consulted prior to gear removal operations; if air quality is poor and minimal use of vehicles is recommended, gear removal operations will be postponed until a day when air quality has improved.
Diver impacts	Divers who will be engaged in underwater removal of derelict fishing gear will be trained beforehand in methods for removal that prevent damage to habitats and impacts to biota. Divers will be trained to disentangle and/or detach live animals and vegetation from the gear at the site of gear removal before transferring the gear to the surface for loading onto a vessel. Dead organisms caught in derelict gear will be censused on board by the team biologist, and then returned to the water to resume decomposition and degradation by scavengers.
Cultural resources	Gear removal on or in the near vicinity of sunken vessels will not be removed until State Lands Commission or State Parks and Recreation have been consulted as to feasible gear removal methods that will prevent impacts to the integrity of the resource.
Marine protected areas	In order to ensure that project activities do not conflict with special habitat or species protection measures of a marine protected area, approval will be obtained from the appropriate management agency prior to project activities.
Traffic/roadways	To ensure that utilization of a single large transport vehicle is required for disposal of removed gear at a local landfill, best efforts will be made to make this trip during the non-rush hour, and to use roadways of appropriate capacity for the vehicle.

Waste disposal	To minimize inputs to public landfills, all efforts will be made to repatriate derelict gear identifiable to owners, or to recycle gear at gear recycling stations.To ensure that disposal needs at public landfills do not exceed landfill capacity, local landfills will be contacted prior to gear removal efforts to ensure that the landfill can accept and dispose of the removed gear.

To ensure that these mitigation measures are implemented, we will undertake the following monitoring activities on-site:

- The SeaDoc Society Derelict Fishing Gear Removal Project Coordinator will ensure that all mitigation measures are implemented.
- Water clarity/visibility permitting, divers will obtain photographs or record video underwater of live organisms before and after disentanglement from gear to document presence and then removal of live animals.
- Divers will obtain photographs or record video of any derelict gear that is left in place as is, or is modified in place to permanently disable it.
- If a substantial level of digging around a partially embedded piece of gear is required to remove it, divers will obtain photographs or record video of the site after removal, to demonstrate best effort at replacing bottom substrate back into holes or pits created by the gear removal effort.
- If divers sight cetaceans, pinnipeds, sea otters, turtles or identifiable threatened or endangered fish or invertebrate species during gear removal operations, the sighting will be recorded, and the behavior of the animal in the vicinity of the gear removal site will also be recorded and reported to the appropriate resources management agency.